

IN THE CLAIMS

1. (currently amended): A process for transmission of information between at least two devices according to which elements of information which are succeeding each other in a time sequence are passed along over an electrical or optical support, said elements of information being made of a packet of bits forming messages which comprise one or more data and/or addresses of the devices for which these data are intended, said process causing no interference with ~~the existing UART existing Universal Asynchronous Receiver/Transmitter (UART) based communication~~ systems of the devices, and allowing nevertheless ~~the an~~ increase of the amount of various distinct messages which a system is able to convey, the process comprising:

- generating a serial message coded by means of a time sequence of binary transitions called bits;
- reducing the time length of all bits in the message by changing ~~them the bits~~ into shorter bits called "reduced bits", in order to insert additional bits whose half duration falls at the moment in time where the binary transitions between unchanged bits occurred when no additional bits are inserted
- keeping ~~the a~~ half duration point of all reduced data bits to the same place as they were in ~~the an~~ unchanged message
- keeping the total duration of the serial message containing the additional bits identical to the total length of the unchanged message,
- the duration of ~~the~~ data bits being reduced by 50% and the duration of ~~the~~ start and stop bits being reduced by 25%.

2. (cancelled)

3. (currently amended): A process according to claim 1 wherein electrical or optical the support is a cable.

4. (currently amended): A process according to claim 1 wherein the time sequence of binary transitions is implemented as a possible presence of a current flowing through the electrical support and having an OFF state and an ON state materialized with, respectively, an absence and ~~a~~ the presence of a current through said electrical support.

5. (canceled)

6. (currently amended): A process according to claim 1 for transmission of information between at least two devices according to which elements of information which are succeeding each other in a time sequence are passed along over an electrical or optical support, said elements of information being made of a packet of bits forming messages which comprise one or more data and/or addresses of the devices for which these data are intended, said process causing no interference with the existing UART based communication systems of the devices, and allowing nevertheless the increase of the amount of various distinct messages which a system is able to convey, the process comprising:

— generating a serial message coded by means of a time sequence of binary transitions called bits;

— reducing the time length of all bits in the message by changing them into shorter bits called “reduced bits”, in order to insert additional bits whose half duration falls at the moment in time where the transitions between unchanged bits occurred when no additional bits are inserted

— keeping the half duration point of all reduced data bits to the same place as they were in the unchanged message

— keeping the total duration of the message containing the additional bits identical to the total length of the unchanged message,
wherein the transmission of information is compliant in voltage and current with the MIDI standard and the message is original data bits in the expanded message form a MIDI message.

7. (currently amended): A process according to claim 1 wherein in order to retrieve the content of the serial message, ~~the~~ a signal is triple sampled.

8. (currently amended): A process according to claim 1 wherein the content of the serial message is retrieved by comparing the changes in ~~the~~ a signal against timing references.

9. (currently amended): A process according to claim 8 wherein there are two timer/counters, the first being restarted each time a level change is detected, the second being used in determining the end of the serial message in case there are no level changes to make the last bit or bits of the serial message.

10. (currently amended): An arrangement for ~~the a~~ communication of information allowing ~~the a~~ transmission of a larger quantity of information between at least two devices than according to a first communication standard, comprising:

- means for connecting a first device to a second device through an electrical support;
- means for causing a flow of information between the two devices as elements succeeding each other in time sequence on the electrical support and materialized by an absence and a presence of a current within the electrical support, said information being made of a packet of bits forming messages which comprise one or more data and/or addresses of the devices for which these data are intended,
- each device comprising an emitter section and a receiver section compatible with ~~the state-of-the-art of a~~ said first communication standard,
- means for coding said information both in said first communication standard and in a second enlarged communication standard
- said means for coding generating a serial message coded by means of a time sequence of binary transitions forming said bits, wherein said means for coding the second enlarged communication standard comprises a circuitry replacing a standard UART driving ~~the line amplifier~~, said circuit being able to modulate the flow of binary information in time in order to reduce the time length of all bits in the serial message by changing ~~them~~ the bits into shorter bits, called "reduced bits", and in order to insert additional bits whose half duration falls at the moment in time where ~~the~~ transitions between unchanged bits occurred according to the first communication standard when no additional bits are inserted, and means for reducing the duration of the data bits by 50% and the duration of ~~the~~ start and stop bits by 25%.

11. (currently amended): An arrangement for the a communication of information allowing the a transmission of a larger quantity of information between at least two devices than according to a first communication standard, comprising:

- means for connecting a first device to a second device through an electrical support;
- means for causing a flow of information between the two devices as elements succeeding each other in time sequence on the electrical support and materialized by an absence and a presence of a current within the electrical support, said information being made of a packet of bits forming messages which comprise one or more data and/or addresses of the devices for which these data are intended,
- each device comprising an emitter section and a receiver section compatible with ~~the state of the art of a~~ said first communication standard,
- means for coding said information both in said first communication standard and in a second enlarged communication standard
- said means for coding generating a serial message coded by means of a time sequence of binary transitions forming said bits, wherein said means for coding the second enlarged communication standard comprises a circuitry replacing a standard UART ~~driving the line amplifier~~, said circuit being able to modulate the flow of binary information in time in order to reduce the time length of all bits in the said message by changing ~~them~~ the bits into shorter bits, called "reduced bits", and in order to insert additional bits whose half duration falls at the moment in time where ~~the~~ transitions between unchanged bits occurred according to the first communication standard when no additional bits are inserted, and wherein said first communication standard is according to the MIDI standard.